

WHAT IS CLAIMED IS:

1. A cleaning method of an annealed silicon wafer comprising the steps of oxidizing a silicon wafer with ozonized water; and cleaning the oxidized silicon wafer with hydrofluoric acid, thus obtaining a silicon wafer in which micro roughness thereof under spatial frequency of  $20/\mu\text{m}$  is  $0.3$  to  $1.5 \text{ nm}^3$  in terms of power spectrum density.
2. The cleaning method according to claim 1, further comprising the steps of oxidizing with ozonized water just after the oxidation step and the hydrofluoric acid cleaning step.
3. The cleaning method according to claim 1, wherein the density of the ozonized water is  $10$  to  $60 \text{ ppm}$ .
4. The cleaning method according to claim 1, wherein the density of the hydrofluoric acid is  $0.5$  to  $2\%$ .